

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6, 9-12, 14-17, 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krage et al. US 5,425,594 in view of Casey US 4,496,264.

With respect to claims 1, 24 Krage et al. discloses a lightweight, less than 30 lbs. for a 6.5' barrier wherein the barrier is a stand-alone barrier (300) that does not require additional mass to function as a barrier. The barrier comprising:

A body (12) having end walls, a recessed top wall, a bottom wall and side panels (20, 16, 18, 14), respectively, the side panels mounted to opposite sides of the barrier for deflecting impacting vehicles.

A structural framework (38) for resisting collapse of the barrier (300) in response to impact of a vehicle. The framework comprising:

A pair of upright members (44) disposed between the ends of the structural frame (38).

A pair of longitudinal members (40) extending along the length of the barrier (38) and connected to each upright member, as by welding.

Wherein the interconnected arrangement of upright and longitudinal members provides the structural framework (38) with sufficient rigidity for resisting direct collapse of the

barrier in the regions of the vehicle impact and from uncontrolled twisting of the barrier around the longitudinal barrier axis. See Col. 4, Ins. 4-44.

Further wherein the body (12) of the barrier is made of low density polyethylene, and does not make a substantial contribution to the rigidity of the barrier.

Although Krage et al. discloses diagonal braces can be added to provide increased rigidity to the frame (38). Krage et al. does not disclose is using more than two upright members. However, Casey teaches it is known to provide a vehicle barrier with a plurality of upright members (22) disposed along the length of the barrier (at least 4 upright members are shown in Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the vehicle barrier of Krage et al., with additional upright members disposed along the length of the barrier, as taught by Casey, in order to increase the rigidity of the barrier.

With respect to Claims 6, 9, 10 Krage et al. discloses the structural framework (38) is made from ASTM-A36 or AISI M-120 steel. See Col. 4, Ins. 17-27. And can weigh less than 30 lbs for 6.5' barrier.

With respect to claims 11, 12 Krage et al. discloses the structural framework can be made of angle beams, flat bars or sheet metal, such as galvanized steel. Wherein the upright braces (44) can be mounted to the sidewalls (14) by bolts. See Col. 3, Ins. 52-53, Col. 4, Ins. 17-27, Col. 6, Ins. 19-29.

With respect to claims 14-16 Krage et al. discloses the longitudinal members (40) can be positioned at or near the center of gravity of a typical passenger car, and is about 20" above the bottom wall (18) the barrier is approximately 33" in height. Krage et al. also illustrates in Fig. 8, the longitudinal members (40) are positioned in the upper half of the barrier.

With respect to claim 17 Krage et al. does not disclose is using more than two upright members. However, Casey teaches it is known to provide a vehicle barrier with a plurality of upright members (22) disposed along the length of the barrier (at least 4 upright members are shown in Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the vehicle barrier of Krage et al., with additional upright members disposed along the length of the barrier, as taught by Casey, in order to increase the rigidity of the barrier.

With respect to claim 19 Krage et al. discloses the side panels (14) can comprise corrugated panel ribs (22).

With respect to claims 20-22 Krage et al. discloses the side panels (14) of the barrier (12) diverge outwardly away from each other. And a lower side panel on each side of

the barrier that prevents vehicle tires from penetrating the barrier and becoming engaged with the barrier. See Fig. 1, adjacent reference arrows (10, 14).

Wherein the panels extend to a location vertically above the longitudinal members and form a recess in a top (16) of the barrier. See Figs. 1-4.

With respect to claim 23 Krage et al. the end walls (20) of the barrier comprise a plurality of hinge plates (30) having respective openings for receiving a hinge pin (36). See Col. 2, Ins. 66-68.

2. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krage et al. US 5,425,594 in view of Casey US 4,496,264 as applied to claim 17 above, and further in view of Anderson US 2003/0086761 A1.

Krage et al. in view of Casey disclose the use of a 6.5' lightweight barrier (12) but do not disclose how the barrier is moved from place to place. However, Anderson teaches it is known to attach a lifting ring (30) to an opening in a multi-purpose barrier member, in order to facilitate lifting the barrier with a crane or the like. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the barrier of Krage et al. in view of Casey, with lifting means, as taught by Anderson, in order to facilitate lifting the barrier with a crane or the like. See [0022].

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krage et al. US 5,425,594 in view of Casey US 4,496,264 as applied to claim 1 above, and further in view of Cobb et al. US 5,054,954.

Krage et al. in view of Casey disclose the use of a 6.5' lightweight plastic barrier (12) having a steel structural frame (38) but do not disclose making the barrier body (12) from steel. However, Cobb et al. teaches it is known to make vehicle barriers (12) comprising a plurality of side panels (14) from plastics, composites or mild gauge steel sheet, that allows deformation of the panel, but will resist penetration of the panel under the average type of impact which will be provided by a vehicle during use.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the barrier body of Krage et al. in view of Casey from mild gauge steel sheet, as taught by Cobb et al., since plastic and sheet steel are art recognized equivalents. See Col. 8, Ins. 37-50.

Response to Arguments

4. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them. In confirmation with the telephonic interview of 3/6/2012 Claims 16, 24 were not addressed in the last Office Action. Therefore, this action is Non-Final, so that Applicant can address the 35 U.S.C. 103(a) rejections of claims 16, 24.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAYMOND W. ADDIE whose telephone number is (571)272-6986. The examiner can normally be reached on 8am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RAYMOND W. ADDIE/
Primary Examiner, Art Unit 3671

4/12/2012